

CHAPTER 4.

Marketplace Conditions

Federal courts have found that Congress “spent decades compiling evidence of race discrimination in government highway contracting, barriers to the formation of minority-owned construction businesses, and barriers to entry.”¹ Congress found that discrimination has impeded the formation and expansion of qualified MBE/WBEs.

As part of the 2014 Availability Study and the 2015 Disparity Study, Keen Independent conducted quantitative and qualitative analyses of conditions in the Arizona marketplace to examine whether barriers that Congress found on a national level also appear in Arizona. The study team analyzed whether barriers exist in the Arizona construction and engineering industries for minorities, women, and for MBE/WBEs, and whether such barriers might affect opportunities on ADOT and local agency transportation contracts.

Understanding marketplace conditions is important as ADOT examines its overall goals for DBE participation in FHWA-, FTA- and FAA-funded contracts and projects the portion of these overall goals to be met through neutral means.

Keen Independent examined conditions in the Arizona marketplace in four primary areas:

- A. Entry and advancement;
- B. Business ownership;
- C. Access to capital, bonding and insurance; and
- D. Success of businesses.

Appendices E through H present detailed quantitative information concerning conditions in the Arizona marketplace. Appendix I discusses data sources. Keen Independent prepared these analyses as part of the 2014 Availability Study.

Chapter 4 also summarizes the analysis of input from more than 400 businesses and trade associations throughout the state. The qualitative information substantially expands on what was analyzed in the 2014 Availability Study. The Keen Independent study team conducted in-depth personal interviews and availability interviews from May 2014 through April 2015. The study team held a listening session involving seven representatives of minority-, women- and majority-owned firms in Tucson in May 2014. ADOT held public meetings in Flagstaff, Yuma, Tucson and Phoenix in August 2014 and also asked for written comments concerning the 2014 Availability Study and its proposed overall DBE goal for FHWA-funded contracts. ADOT repeated this process in 2015.

¹ *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d, 970 (8th Cir. 2003) (citing *Adarand Constructors, Inc.*, 228 F.3d at 1167 – 76); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983, 992 (9th Cir. 2005).

ADOT and study team members held meetings with trade groups as well as an External Stakeholder Group formed for the study. Input from these meetings is also incorporated into this report. ADOT and the study team developed a website for the study that asked any interested individuals to provide comments. Input received through these and other efforts is included as well.

The balance of Chapter 4 summarizes the quantitative information collected and analyzed in the Availability Study in 2014. Appendices E through I provide supporting information concerning the quantitative analyses. Chapter 4 also summarizes qualitative information collected through July 23, 2015. Appendix J provides a summary of the qualitative information collected as part of the Availability Study and Disparity Study process.

A. Entry and Advancement

Several business owners and managers that the study team interviewed commented that individuals who form construction and engineering businesses tend to work in those industries before starting their own businesses. Any barriers related to entry or advancement in the construction and engineering industries may prevent some minorities and women from starting construction and engineering businesses. Several studies throughout the United States have indicated that race and gender discrimination has affected the employment and advancement of certain groups in the construction and engineering industries. The study team examined the representation of minorities and women among all workers in the Arizona construction and engineering industries. In addition, for the construction industry, the study team examined the advancement of minorities and women into supervisory and managerial roles. Appendix E presents those results in more detail.

Quantitative analyses of the Arizona marketplace — based primarily on data from the 2000 U.S. Census and the 2008-2012 American Community Survey (ACS) — showed that, in general, certain minority groups and women appear to be underrepresented among all workers in the Arizona construction and engineering industries. In addition, minorities and women appeared to face barriers regarding advancement to supervisory or managerial positions.

Quantitative information concerning entry into construction and engineering industries in Arizona. Keen Independent's analyses suggest that there are barriers to entry for certain minority groups and for women in the construction and engineering industries in Arizona.

- Fewer African Americans worked in the Arizona construction industry than what might be expected based on representation in the overall workforce and analysis of educational requirements in the industry.
- Fewer African Americans, Hispanic Americans and Native Americans worked in the Arizona engineering industry than what might be expected based on analyses of workers 25 and older with a college degree.
- Women accounted for particularly few workers in the Arizona construction and engineering industries. For the construction industry as a whole, women were 11 percent of workers. Women accounted for just 1 to 4 percent of all workers in certain construction trades.

Any barriers to entry in construction and engineering might affect the relative number of minority and female business owners in these industries in Arizona.

Quantitative information concerning advancement in the Arizona construction industry. The study team also examined advancement in the Arizona construction industry.

- Representation of minorities and women was much lower in certain construction trades (including first-line supervisors).
- Compared to non-Hispanic whites working in the construction industry, African Americans, Asian Americans, Hispanic Americans and Native Americans were less likely to be managers.

Any barriers to advancement in the Arizona construction industry may also affect the number of business owners among those groups.

Qualitative information about entry and advancement. Keen Independent collected qualitative information about entry and advancement in the Arizona construction and engineering industries through the avenues described at the beginning of Chapter 4.

Many business owners reported that they worked in the construction or engineering industry before starting their businesses. Interviewees indicated that construction and engineering companies are typically started (or sometimes purchased) by individuals with connections to the construction or engineering industries. Therefore, business ownership could be affected by any barriers to becoming employed in the construction or engineering industry that might exist.

Effects of entry and advancement on the transportation contracting industry. If there are barriers for minorities and women entering and advancing within the Arizona construction and engineering industries, there would be substantial effects on the number of minority- and women-owned construction and engineering-related businesses.

- Typically, employment and advancement are preconditions to business ownership in the construction and engineering industries. Because certain minority groups and women appear to be underrepresented in the Arizona construction and engineering industries — both in general and as supervisors and managers — it follows that such underrepresentation may reduce the number of minorities and women starting businesses, reducing overall MBE/WBE availability in the local transportation contracting industry.
- Underrepresentation of certain minority groups and women in the Arizona construction and engineering industries — particularly in supervisory and managerial roles — may perpetuate any beliefs or stereotypical attitudes that MBE/WBEs may not be as qualified as majority-owned businesses. Any such beliefs may make it more difficult for MBE/WBEs to win work in Arizona, including work with ADOT and local agencies.

B. Business Ownership

National research and studies in other states have found that race, ethnicity and gender also affect opportunities for business ownership, even after accounting for race- and gender-neutral factors. Figure 4-1 summarizes how courts have used information from such studies — particularly from regression analyses — when considering the validity of an agency's implementation of the Federal DBE Program.

Quantitative information about business ownership.

Keen Independent used regression analyses and data sources that were similar to those used in other studies to analyze business ownership in the Arizona transportation contracting industry. The study team used U.S. Bureau of the Census data from 2000 and 2008-2012 to examine whether there are differences in business ownership rates between minorities and non-minorities and between women and men in the Arizona construction and engineering industries.

The regression models that the study team developed showed that African Americans, Hispanic Americans, Native Americans and women working in the Arizona construction industry are less likely to own businesses than non-Hispanic whites and males, even after accounting for various personal characteristics including education, age and the ability to speak English.

African Americans and Hispanic Americans working in the Arizona engineering industry are less likely to own businesses after accounting for certain personal characteristics.

Appendix F presents detailed results from the quantitative analyses of business ownership rates.

Qualitative information about business ownership. Keen Independent collected qualitative information about business ownership in the Arizona construction and engineering industries through in-depth interviews, availability interviews, public hearings and other means.

Interviewees indicated that the Great Recession that began in 2007 made it extremely difficult for any owner of a construction or engineering firm to stay in business in Arizona, let alone start a new firm. Companies that were primarily working in the private sector had to quickly turn to compete for public sector work or go out of business. The result was extreme price pressure in the industry, with many companies choosing to bid work below cost in order to stay in the market. Many companies did not survive. Larger and better-capitalized firms fared better during the downturn. Some prime contractors had the ability to retain more work at the expense of subcontractors.

Figure 4-1.

Use of regression analyses of business ownership in defense of the Federal DBE Program

State and federal courts have considered differences in business ownership rates between minorities and women and non-Hispanic whites and males when reviewing the implementation of the Federal DBE Program, particularly when considering DBE goals. For example, disparity studies in California, Illinois and Minnesota used regression analyses to examine the impact of race, ethnicity and gender on business ownership in the construction and engineering industries. Results from those analyses helped determine whether differences in business ownership exist between minorities and women and non-Hispanic white males after statistically controlling for race- and gender-neutral characteristics. Those analyses, which were based on Census data, were included in materials submitted to the courts in subsequent litigation concerning the implementation of the Federal DBE Program.

Minority, women and white male owners of small businesses in the industry reported many of the same challenges. Many faced financial barriers at start-up and beyond. As examined later in Chapter 4 (and in Appendix H), minority- and women-owned firms in the Arizona marketplace are disproportionately small.

Effects of disparities in business ownership rates for minorities and women on the transportation contracting industry. In sum, the disparities in business ownership rates for minorities and women lower the relative number of minority- and women-owned firms available for ADOT construction and engineering work. This might result in a lower availability benchmark for minority- and women-owned firms and a lower base figure for the overall DBE goal.

C. Access to Capital, Bonding and Insurance

Access to capital represents one of the key factors that researchers have examined when studying business formation and success. If race- or gender-based discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start or expand a business.

Keen Independent examined whether minority and female business owners (and potential business owners) have access to capital — both for their homes and for their businesses — that is comparable to that of non-minorities and men. In addition, the study team examined information about whether minority- and women-owned firms face any barriers in obtaining bonding and insurance. Appendix G provides details about the study team’s quantitative analyses of access to capital, bonding and insurance.

There is evidence that minorities and women face certain disadvantages in accessing capital that is necessary to start, operate and expand businesses. Capital is required to start companies, so barriers accessing capital can affect the number of minorities and women who are able to start businesses. In addition, minorities and women start business with less capital (based on national data). A number of studies have demonstrated that lower start-up capital adversely affects prospects for those businesses.

Quantitative information about homeownership and mortgage lending. Wealth created through homeownership can be an important source of funds to start or expand a business. Barriers to homeownership or home equity can affect business opportunities by limiting the availability of funds for new or expanding businesses.

Keen Independent analyzed 2008-2012 American Community Survey (ACS) data to determine if there were any differences in homeownership in Arizona by racial and ethnic groups. The study team examined the potential impact of race and ethnicity on mortgage lending in Arizona based on Home Mortgage Disclosure Act (HMDA) data for 2007 and 2012. (See Appendix G for more detail.)

- **Homeownership rates.** Relatively fewer African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans and Native Americans in Arizona own homes compared with non-Hispanic whites. These differences in homeownership rates were present prior to the Great Recession and persisted in 2008 through 2012.

- **Home values.** Native Americans, African Americans and Hispanic Americans in Arizona who do own homes tend to have lower home values than non-Hispanic whites. These differences were evident before and after the Great Recession. There is some evidence from Arizona State University research that discriminatory practices have led to lower housing values in certain minority communities (see Appendix G).
- **Mortgage lending.** Minorities may be denied opportunities to own homes, to purchase more expensive homes or to access equity in their homes if they are discriminated against when applying for home mortgages.

In 2007, high-income African Americans, Hispanic Americans, Native Americans, Asian Americans, and Native Hawaiian and other Pacific Islanders applying for home mortgages in Arizona were more likely than high-income non-Hispanic whites to have their applications denied. Except for Asian Americans, these disparities were also evident in 2012.

Mortgage lending discrimination can also occur through higher fees and interest rates. Subprime lending is one example of such types of discrimination through fees associated with various loan types. Because of higher interest rates and additional costs, subprime loans affected homeowners' ability to grow home equity and increased their risks of foreclosure. There is national evidence that predatory lenders disproportionately targeted minorities with subprime loans, even when applicants could qualify for prime loans. Analysis of available data for Arizona indicates that high-income African Americans, Hispanic Americans, Native Americans, Asian Americans, and Native Hawaiian and other Pacific Islanders applying for home mortgages in 2007 were more likely than high-income non-Hispanic whites to have their applications denied. Except for Asian Americans, these disparities were also evident in 2012. Racial and ethnic disparities in the use of subprime loans for conventional home refinance were also evident in Arizona.

In conclusion, there is substantial quantitative evidence of disparities in homeownership, home values and home mortgage lending for minorities in Arizona. Any past discrimination against minorities that affected the ability to purchase and stay in homes could have long-term impacts on the home equity available to start and expand businesses, and the ability of minority business owners to access business credit.

Quantitative information about business credit. Business credit is also an important source of funds for small businesses. Any race- or gender-based barriers in the application or approval processes of business loans could affect the formation and success of MBE/WBEs.

To examine the role of race/ethnicity and gender in capital markets, the study team analyzed data from the Federal Reserve Board's Survey of Small Business Finances (SSBF) — the most comprehensive national source of credit characteristics of small businesses (those with fewer than 500 employees). The survey contains information on loan denial and interest rates as well as anecdotal information from businesses. The Mountain region is the level of geographic detail of SSBF data most specific to Arizona and 2003 is the most recent information available from the SSBF.

Business loan approval rates. Keen Independent examined business loan approval rates in the Mountain region in 2003. Results included the following:

- More minority- and women-owned small businesses were denied loans than non-Hispanic male-owned small businesses.
- There are statistically significant disparities in loan approval rates for African American-owned small businesses compared with similarly-situated non-Hispanic white-owned firms.

Applying for loans. Fear of loan denial can be a barrier to business credit in the same way that actual loan denial presents a barrier. The SSBF includes a question that gauges whether a business owner did not apply for a loan due to fear of loan denial.

- Among small business owners who reported needing business loans, minority and female business owners in the Mountain region were nearly twice as likely as non-Hispanic white men to report that they did not apply due to fear of denial.
- Compared with similarly-situated non-minorities and men, the study team identified statistically significant disparities in that rate at which African Americans and women reported not applying for loans due to fear of denial.

Loan values and interest rates. Based on Keen Independent's examination of 2003 SSBF data for the average business loan values and interest rates paid by small businesses that received loans:

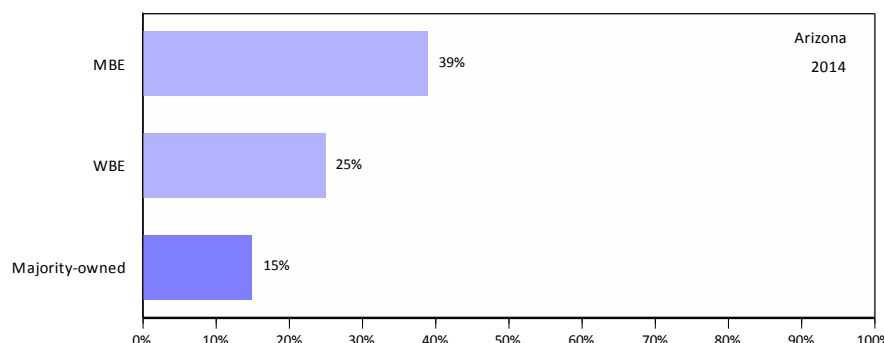
- The mean value of approved loans for minority- and female-owned businesses in the Mountain region was less than one-half that for non-Hispanic white male-owned firms.
- There is evidence that minority- and women-owned small businesses in the Mountain region paid higher interest rates on their business loans than non-minority male-owned small businesses.

Experiences of MBEs, WBEs and majority-owned businesses in the Arizona transportation construction and engineering industries. As part of availability interviews that the study team conducted in spring 2014, Keen Independent asked several questions related to potential barriers or difficulties in the local marketplace. The interviewer introduced these questions with the following: "Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences within the past seven years as you answer these questions."

The first question was, "Has your company experienced any difficulties in obtaining lines of credit or loans?" Minority-owned firms were more than twice as likely as majority-owned firms to report that they had such difficulties. About 39 percent of MBEs reported difficulties obtaining lines of credit or loans, compared with 15 majority-owned firms.

About 25 percent of WBEs reported that they had experienced difficulties obtaining lines of credit or loans. These results appear to be consistent with the other data summarized in Chapter 4 concerning greater difficulties concerning access to financing for minority- and women-owned firms.

Figure 4-2.
Percent responding
“yes” to, “Has your
company
experienced any
difficulties in
obtaining lines of
credit or loans?” for
MBEs, WBEs and
majority-owned
firms



Source:

Keen Independent
Research from 2014
Availability Interviews.

Quantitative information about bonding and insurance. Keen Independent also examined whether businesses face difficulties obtaining bonding and insurance as part of the availability interviews.

Keen Independent asked firms completing availability interviews the following two questions:

- Has your company obtained or tried to obtain a bond for a project?
- [If so] Has your company had any difficulties obtaining bonds needed for a project?

Among firms that had obtained or tried to obtain a bond for a project, 31 percent of MBEs and 23 percent of WBEs indicated difficulties obtaining bonds needed for a project compared with 9 percent of majority-owned firms.

The study team also asked, “Have any insurance requirements on projects presented a barrier to bidding?” Again, insurance requirements appear to present a barrier to relatively more minority- and women-owned firms than majority-owned firms. Approximately 20 percent of MBEs and 18 percent of WBEs that the study team interviewed reported such difficulties compared with 11 percent of majority-owned firms.

Qualitative information about access to capital, bonding and insurance. Keen Independent collected qualitative information about access to capital, bonding and insurance for businesses in the Arizona transportation contracting industry through in-depth interviews, availability interviews and public hearings and other means.

Business financing. Many firm owners reported that obtaining financing was important in establishing and growing their businesses (including financing for working capital and for equipment), and surviving poor market conditions.

- Small business owners indicated that access to financing was a barrier in general and more specifically when starting and first growing. Many used personal resources to finance their businesses. They also report more difficulty obtaining financing with the recent recession.
- Some interviewees, including MBEs, WBEs and majority-owned firms, reported that receiving timely payment on contracts and subcontracts could often be difficult which led to an increased need for business capital and financing.
- Some interviewees reported that it was more difficult for women and minorities to obtain financing. Some interviewees reported that they had good collateral but could not get a loan. “The banks won’t touch me” was a comment from a Hispanic female construction business owner who was able to get loans up until the recession. Another interviewee said, “There is not a level playing field” concerning the ability of minority- and women-owned firms to access needed financing. Others reported that financing was a problem for all small businesses whether or not they are minority- or women-owned.
- Also, if business size and personal equity are affected by race or gender discrimination, that discrimination could also impact the ability to obtain business financing. This can have a self-reinforcing effect, as many interviewees noted the importance of business capital and credit to pursue larger construction and engineering contracts.

Bonding. For ADOT and local agency construction contracts, surety bonds are typically required to bid on projects. Sometimes prime contractors require subcontractors on a project to have bonds.

In order to obtain a bond, businesses must provide company history and evidence of financial strength to a bonding company. The bonding company uses this information to determine whether to issue a bond of a particular size. Consequently, any effects on access to capital may impact the ability to obtain a bond.

According to business owners and other individuals interviewed:

- Many MBEs, WBEs and other small construction companies cannot obtain the necessary bonding to bid on ADOT and other public contracts.
- Interviewees explained the link between business capital and bonding as well as between personal finances and bonding. For example, one minority business owner said, “The bonding companies basically own your life. They make you sign your life away, your wife’s life away, and they make you put cash in. It was difficult getting started.”

The in-depth interviews indicate that any difficulties building capital affect the ability to obtain a surety bond.

Access to insurance. Construction and professional services firms bidding or proposing on ADOT and local government contracts must meet those agencies' insurance requirements. Provisions often apply to subcontractors and subconsultants.

The study team asked business owners and managers whether insurance requirements and obtaining insurance presented barriers to doing business. In general, interviewees reported that obtaining insurance is relatively easy. The barrier presented by insurance requirements is due to the cost, especially at high levels of coverage.

If a small business owner decides that the premiums for a certain level of insurance are cost-prohibitive, it may preclude the firm from bidding on certain contracts, especially public sector contracts.

Effects of access to capital, bonding and insurance on the transportation contracting industry.

Potential barriers associated with access to capital, bonding and insurance may affect business outcomes for MBE/WBEs.

- Well-capitalized businesses are, in general, more successful than other businesses.
- Bonding and insurance are required to bid on ADOT and other public sector prime contracts. Interviewees report that these requirements affect subcontractors as well.
- A company must also have considerable working capital to complete an ADOT contract or subcontract, especially if there are delays in payment on that contract (which some businesses experience).
- Compared with majority-owned firms, MBE/WBEs in the Arizona transportation contracting industry are disproportionately small. Obtaining business financing, bonding and insurance is more of a barrier to small businesses than large businesses. The effect of such barriers is to make it less likely that a small firm can expand or successfully pursue public sector work.
- To obtain bonding, a company must have financial strength. Any barriers to accessing capital can affect a company's ability to obtain a bond of a certain size. There is evidence that minority- and women-owned firms do not have the same access to capital as majority-owned firms.
- There is some quantitative evidence that minorities do not have the same personal access to capital as non-minorities, which affects personal financial resources. Personal net worth and financial history can affect access to business loans, bonding and prequalification for public sector work in Arizona.

D. Success of Businesses

Keen Independent completed quantitative and qualitative analyses that assessed whether the success of MBE/WBEs differs from that of majority-owned businesses in the Arizona transportation contracting industry. The study team examined business success in terms of participation in the public and private sector; relative bid capacity; business closure, expansion, and contraction; and business receipts and earnings. Appendix H provides details about these quantitative analyses of success of businesses. Keen Independent also collected and analyzed information from interviews with business owners and managers and others knowledgeable about the local contracting industry.

Quantitative analysis of participation in the public sector, contracting roles and bid capacity.

Keen Independent drew on information from availability interviews to examine any patterns of MBE/WBE and majority-owned business participation in the industry. Results suggest the following:

- Most firms in the transportation contracting industry pursue both public and private sector work.
- Compared with majority-owned companies, relatively few MBEs or WBEs have been awarded contracts or subcontracts of \$1 million or more in size.
- The largest contracts or subcontracts MBEs and WBEs have bid on or been awarded were lower than majority-owned firms in the same subindustries. In part, this is because MBEs and WBEs as a whole are newer firms.

Quantitative analysis of business closure, expansion and contraction. Based on U.S. Small Business Administration analyses for 2002 to 2006 for Arizona:

- African American-owned businesses were more likely than white-owned businesses to close. African American-owned businesses were also less likely to expand than white-owned businesses.
- Asian American-owned businesses were more likely to close, less likely to expand and more likely to contract than white-owned businesses.
- Closure, expansion and contraction rates for Hispanic American-owned businesses were similar to white-owned firms for those years.

The U.S. Small Business Administration analyses did not report results for women-owned firms.

Quantitative analysis of business receipts and earnings. Keen Independent examined business earnings data for Arizona construction and engineering-related industries from the U.S. Census Bureau and the 2014 availability interviews with Arizona businesses. The data for annual revenue pertained to 1999, 2007 through 2009 and the three years before 2014.

- Across time periods and data sources, minority- and women-owned firms had lower revenue than majority-owned firms.

- One of the data sets the study team examined included personal characteristics of the business owner. Regression analyses using these data indicated that female business owners had lower earnings than male owners after controlling for other factors.

Quantitative analysis of telephone interview results concerning potential barriers. Keen Independent's availability interviews with Arizona businesses included questions about whether firms had experienced barriers or difficulties associated with starting or expanding a business. Questions included whether (a) the size of projects had presented a barrier to bidding; (b) the firm had experienced difficulties learning about bid opportunities with ADOT, local governments or private companies; and (c) the firm had experienced difficulties learning about subcontracting opportunities in Arizona. Results include the following:

- A greater percentage of minority- and women-owned firms indicated difficulties learning about bid opportunities, including ADOT opportunities, compared with majority-owned businesses. For example, the percentage of minority-owned businesses reporting that they experienced difficulties learning about ADOT bid opportunities (29%) was substantially higher than that for majority-owned firms (17%). About 23 percent of white women-owned firms indicated that they experienced difficulty learning about ADOT bid opportunities.
- Similar differences were evident when firms were asked about learning about local government and private sector bid opportunities.
- MBEs and WBEs were also more likely than majority-owned firms to report difficulties learning about subcontracting opportunities. Twenty-six percent of minority-owned firms indicated such difficulties compared with 17 percent of majority-owned firms. Thirty-two percent of white women-owned firms reported difficulties learning about subcontracting opportunities.

Qualitative information about success of businesses in the Arizona marketplace. Keen Independent also collected qualitative information about success of businesses in the Arizona transportation contracting industry through in-depth personal interviews, availability interviews, public hearings and other avenues. Some of the comments, especially related to the Great Recession, were noted earlier in Chapter 4.

Fluid employment size and types of work. Interviewees explained that firms in the transportation contracting industry must continuously adapt their operations in response to marketplace conditions. This flexibility includes the size of a company's permanent and temporary workforce, owned and leased equipment, and the types of work they pursue and licenses they hold.

- In Arizona, some firms indicated they have changed lines of work depending on market opportunities. Many businesses reported bidding as both a prime and subcontractor, and pursuing both public and private sector work.
- A number of companies reported that their employment size expands and contracts depending on work opportunities, season or market conditions. One contractor interviewed had to cut his workforce in half. He went from almost 40 employees in 2010 to 20 by 2014.

- Some firm owners reported flexibility in the locations and sizes of contracts that their firms perform. Some businesses reported they prefer to perform projects close to home. Conversely, many firms reported that they might seek work throughout the state.
- Market conditions and backlog of work also affected prime contractors' decisions to subcontract work out. Interviewees explained that primes are reluctant to subcontract work if they are slow and have the capabilities to perform that work with their own employees.
- Interviewees reported that it may be easy for a construction contractor to perform smaller contracts than he or she typically bids, increasing competition for small projects in lean times.
- Some interviewees reported that small businesses may be at a disadvantage because the acquisition of equipment and supplies is affected by the financial health of the company and its ability to obtain financing.

Importance of business relationships. Existing relationships are an important factor in finding opportunities to bid on work according to many prime and subcontractors. Interviewees frequently reported the following.

- Prime contractors take price into consideration when selecting a subcontractor, but the previous relationships they have play a large role in the selection process. Confidence that a subcontractor will perform well on a job is important to a prime contractor.
- Business owners reported that it is difficult to cultivate new relationships with prime contractors. One said, "The prime would send out a generic email with two thousand subcontractors and trying to get your foot in the door is difficult." Some reported that a new subcontractor's bid may be "shopped" so that the incumbent subcontractor or supplier can match or beat their price.
- Opportunities for a prime contractor or consultant to win work with a customer may also be based on prior relationships. One DBE business owner said, "If you [have] a selection committee and they know your firm, they know you, versus another guy who is going through the same selection committee, they are not that familiar with them ... they are [almost always] going to go with you. When you are trying to develop these relationships, particularly with ADOT, they have a requirement. If you have previous ADOT experience, then you get a preference."

Many minority, female and white male interviewees reported the presence of a "good ol' boy" network in Arizona that affects the construction and engineering industries.

- Some interviewees said that the "good ol' boy" network was pervasive in this industry in Arizona and some reported that the "good ol' boy" network added barriers for women- and minority-owned firms in the transportation contracting industry.
- Some interviewees acknowledged the "good ol' boy" network, but suggested that its influence is not as strong today as in the past. Representatives of one organization said that there were firms involved in the network, but that those businesses started out small and worked hard to get where they are.

Disadvantages for small businesses. Many interviewees indicated that small businesses are at a disadvantage when competing in the transportation contracting industry.

- For many of the reasons discussed above, many small businesses including MBE/WBEs said that it was difficult to establish relationships with prime contractors and customers.
- Access to financing can be affected by business size according to some interviewees.

In addition, owners and managers of small businesses reported that public agency contracting processes and requirements often put small businesses at a disadvantage when competing for public sector work. There was qualitative evidence that:

- It is more difficult for smaller firms to market and identify contract opportunities.
- Small construction businesses seeking prime contracting and subcontracting work face barriers due to public sector bonding requirements.
- Excessive paperwork that often comes with public sector work is an extra burden to small businesses.
- Large size and scope of public sector contracts and subcontracts present a barrier to bidding.
- Public sector insurance requirements are a barrier to construction and engineering-related businesses seeking public sector prime contracts and subcontracts. One interviewee said, “The insurance requirements are extraordinarily large for a small contractor. It is the single largest business expense I have and I must have, whether I am a prime or a sub.”
- Interviewees indicated that public agencies favor bidders and proposers they already know, limiting opportunities for other businesses.
- Some interviewees reported that public agencies favor larger companies.
- Public agency screening of potential contractors and engineering firms through prequalification can be a barrier to bidding based on the interviews. According to one DBE firm owner, “ADOT prequalification is almost impossible. You go through it, you have to do ‘X’ amount of paperwork and then they give you the littlest amount as possible. They don’t trust you to do the job even though I am doing larger jobs out-of-state. I have proven references and history. They require a level of financial statements that my bonding company doesn’t even require.”
- Slow payment by public agencies or by prime contractors can be especially damaging to small businesses and represent a barrier to performing that work. (Some interviewees reported that they do not have sufficient capital to wait to be paid when working on large contracts.) One interviewee said, “There are prime contractors that sit on your money for over a year.”

MBE/WBEs in the Arizona transportation contracting industry are more likely than majority-owned businesses to be low-revenue businesses. Therefore, any barriers for small businesses may have a disproportionate effect on MBEs and WBEs. Some minority and female business owners indicated that the size of their businesses and lack of relationships in the industry create significant barriers.

Stereotyping and other race and gender discrimination. In the in-depth interviews, availability interviews and other information the study team analyzed as part of the study, some interviewees indicated difficulties for minorities and women other than those associated with being a small business.

- There was some evidence that some prime contractors or customers held negative stereotypes concerning minority- and women-owned firms. One firm owner said, “White female-owned businesses are going to be treated different, that is just the human nature of the business. A black man’s business will probably get treated a whole lot different and it isn’t going to be to his advantage.”
- Some interviewees reported that MBEs and WBEs face other discrimination from prime contractors, customers or others based on race, ethnicity or gender. One interviewee said, “When it comes to dealing with people who are hesitant, until you prove yourself, you have to open up your book, license and personal financial statement. I think there is a lot more scrutiny to a person of color than anybody else.”
- There were many comments indicating presence of on the basis of race or ethnicity and many comments pertaining to presence of gender discrimination affecting business owners in the Arizona transportation contracting industry.

A few minorities and women interviewed in the study and providing comments at public hearings indicated that their businesses were not affected by any race or gender discrimination.

Appendix J provides views from a large number of business owners and managers, trade association representatives and others who are knowledgeable about the Arizona transportation contracting industry.

Effects of success of businesses on the transportation contracting industry. Minority- and women-owned construction and engineering businesses in Arizona tend to have lower revenue than majority-owned businesses. Therefore, any disadvantages for small businesses disproportionately affect MBEs and WBEs.

Success in the transportation contracting industry depends on relationships with prime contractors and customers. Some minority and female business owners reported that they were disadvantaged by their size and lack of relationships within the industry. Some of the minority and female interviewees also reported negative stereotypes and other forms of discrimination against minority- and women-owned businesses in Arizona.

Summary

As discussed in this Chapter and supporting appendices, there is some quantitative and qualitative information suggesting that there is not a level playing field for minority- and women-owned businesses in the Arizona transportation contracting industry.

Such information should be considered when interpreting the results of the disparity analysis (Chapter 6) and considering ADOT's future operation of the Federal DBE Program for FHWA-funded contracts (see Chapter 8), FTA-funded contracts (Chapter 9) and FAA-funded contracts (Chapter 10).

In July 2015, ADOT held additional public meetings and solicited other comments concerning the results contained in the draft 2015 Disparity Study. Keen Independent reviewed this input prior to completing the analyses in the report. The Final Report presents analysis of this additional input.